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ALLEGHENY FOREST EXPERIMENT STATION*

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Eliminating Hardwood Stump Sprouts 2.2

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Stump sprouts are a nuisance on cleared right-of-ways for roads, railroads, and fire, pipe, power, and telephone lines. They are often undesirable in pastures and fence rows, and even on permanent forest land they may crowd out tree seedlings of greater potential value than the sprouts.

A cheap and effective method of eliminating these sprouts is simply to break them off the stump in early summer for two or more consecutive years. This conclusion was reached after completing a study of stump behavior on the Kane Experimental Forest in Northwestern Pennsylvania. Stumps resulting from cutting a glaze-damaged 40-year-old black cherry stand in the early summer of 1937 were in August of the same year girdled, peeled or left intact. One year later all sprouts on treated and untreated stumps were counted and measured. Though both treatments reduced the vigor of sprouting, they were not successful in eliminating them. For comparison a third method, breaking off the sprouts, was tried the second and third year. The relative cost and effectiveness of the three treatments are given in the table below.

Black Cherry Sprout Treatments

Treatment of Stump	Stumps Sprouting	Sprouts per Stump	Sprout Length per Stump	Average Time to Treat One Stump	Average Cost of Treatment
	Percent	Number	Feet	Minutes	Cents
Untreated	87.5	14.3	66.0		
Peeled	67.0	9.0	31.8	3.80	3.2
Girdled at Ground Line	33.0	6.4	22.4	3.20	2.7
First de-sprouting	62.0	-	-	0.25	0.3
Second de-sprouting	0.0	-	-	0.07	0.1

Desprouting was by far the cheapest and most effective method. Observations on other species indicate that following desprouting, beech stumps resprout more weakly, and sugar and red maple stumps more strongly than black cherry. The best time to do the work is in early summer, just after the sprouts have completed their period of rapid height growth.

* In cooperation with the University of Pennsylvania.

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